

**ARIZONA GAME AND FISH DEPARTMENT  
HABITAT PARTNERSHIP COMMITTEE  
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 12-311

**PROJECT INFORMATION**

**Project Title:** Racetrack Windmill

**Region and Game Management Unit:** Region III; GMU 19A

**Local Habitat Partnership Committee (LHPC):**

- Prescott

**Was the project presented to the LHPC?**

YES[] NO[X]

**Has this project been submitted in previous years?** YES[] NO[X]

**If Yes, was it funded?** YES[] NO[] → **Funded HPC Project #(s):**

**Project Type:** Windmill

**Brief Project Summary:**

The Racetrack Windmill (to be located above Racetrack Wash) would provide a reliable water source for game and nongame wildlife species in an area where water is the population-limiting habitat component for many species. In addition, the improved water distribution within the Cienega Grazing Allotment on the Prescott National Forest would better disperse livestock on the allotment for a more uniform (less concentrated) utilization of the available forage, which would be favorable for wildlife.

**Big Game Wildlife Species to Benefit:** Mule Deer would benefit from this project in that a reliable year-round water source would be established within the chaparral and desert scrub habitat type. Prescott National Forest has completed the NEPA process and is beginning to implement their Black Hills Vegetation Management Project this year, which proposes vegetation treatments over an enormous area in the Black Hills Range (the vicinity of Mingus Mountain) during the next half-dozen years. These treatments include approximately 120,000 acres of prescribed fire; 4,300 acres of tree thinning; 6,700 acres of mechanized "brush-crushing"; 1,600 acres of wildlife treatments (opening travel corridors); and 4,400 acres of watershed treatments. This aggressive vegetation management strategy will set much of the vegetation back to early successional stages over a large area, and provide much additional browse for deer. The Racetrack Windmill would enhance water availability in this area, where water currently limits the carrying capacity of the deer population. This project will be especially valuable in boosting the potential of the area's deer population after the Black Hills vegetation treatments provide much additional forage for deer utilization. Other big game species that will use the water include elk and javelina, although their use will be minor compared to that of mule deer.

**Implementation Schedule** (Month/Day/Year):

Project Start Date: December 01, 2012

Project End Date: June 31, 2013

**Environmental Compliance:**

NEPA Completed: Yes[X] No[] N/A[]

Projected Completion Date: \_\_\_\_\_

State Historic Preservation Office - Archaeological Clearance:

Yes[] No[] N/A[X]

Projected Completion Date: \_\_\_\_\_

Arizona Game and Fish Department EA Checklist: N/A[X]

To be Completed by: \_\_\_\_\_

Projected Completion Date: \_\_\_\_\_

<b>PROJECT FUNDING</b>		
<b>Special Big Game License Tag Funds Requested:</b>	\$ 5,000	
<b>Cost Share or Matching Funds:</b>	\$ 5,000	
<b>Total Project Costs:</b>	<b>\$ 10,000</b>	
<b>PARTICIPANT INFORMATION</b>		
<b>Applicant</b> (please print): Tom Bagley	<b>Address:</b> Arizona Game and Fish Dept. 5325 N. Stockton Hill Rd. Kingman, AZ 86409	<b>E-mail:</b> tbagley@azgfd.gov
<b>Telephone:</b> (928)856-0800		<b>Date:</b> 08/31/2012
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel): -AGFD applicant-		
<b>Project has been coordinated with:</b> US Forest Service personnel: Kelli Spleiss and Tim Mabery (Range), Albert Sillas (Wildlife); Gary Halford (Flower Pot Ranch manager); Wade Albrecht (AGFD Region III Landowner Access Coordinator)		

#### **NEED STATEMENT – PROBLEM ANALYSIS:**

The area around Mingus Mountain in GMU 19A has great potential habitat for mule deer; however, much of the desert scrub and chaparral habitat is thick, old, and “decadent”, which makes the forage and nutrients unavailable for deer browse. The Prescott National Forest recently got clearance to begin implementation of their Black Hills Vegetation Management Project. Beginning in October 2012 and continuing for the next half-dozen years, this project will aggressively treat the vegetation in the Black Hills Range (the Mingus Mountain range of hills). It proposes to treat approximately 120,000 acres with prescribed fire, in addition to 4,300 acres of tree thinning; 6,700 acres of mechanized “brush-crushing”; 1,600 acres of wildlife treatments (opening travel corridors); and 4,400 acres of watershed treatments. This large-scale vegetation management strategy will set much of the brush back to early successional stages over a large area, providing much additional browse for deer. Currently, water availability is the limiting habitat component for the deer population in this area. As the Black Hills Vegetation Management Project utilizes prescribed burns to reduce the thick brush over 120,000 acres, it will create much-needed deer forage. This will not benefit the deer population unless the limiting habitat component (water availability) is improved.

#### **PROJECT OBJECTIVES:**

Construction of the Racetrack Windmill would enhance water availability in this area, where water currently limits the carrying capacity of the deer population. When prescribed fire and other vegetation treatments of the Black Hills Project create a lot of additional forage, there will be an even greater imbalance in the deer habitat components of food, water, shelter, and space. The lack of water will prevent the deer population from capitalizing on this new forage resource. The Racetrack Windmill would provide much-needed water in the area, removing a barrier for the deer herd to expand with the improved forage availability.

In addition, the Racetrack Windmill would improve cattle distribution, and therefore cattle forage utilization, within the Racetrack and Johnson Wash pastures on the Cienega Grazing Allotment. Although each of these pastures is fenced from the other, they are always grazed together. Water availability is not dependable at Hank’s Tank stock tank in the Racetrack Pasture; and the few natural

springs in the area have low water output. Racetrack Windmill would provide year-round water in the vicinity and spread out the concentrated livestock utilization of the forage in these pastures, to the benefit of wildlife.

### **PROJECT DESCRIPTION AND STRATEGIES:**

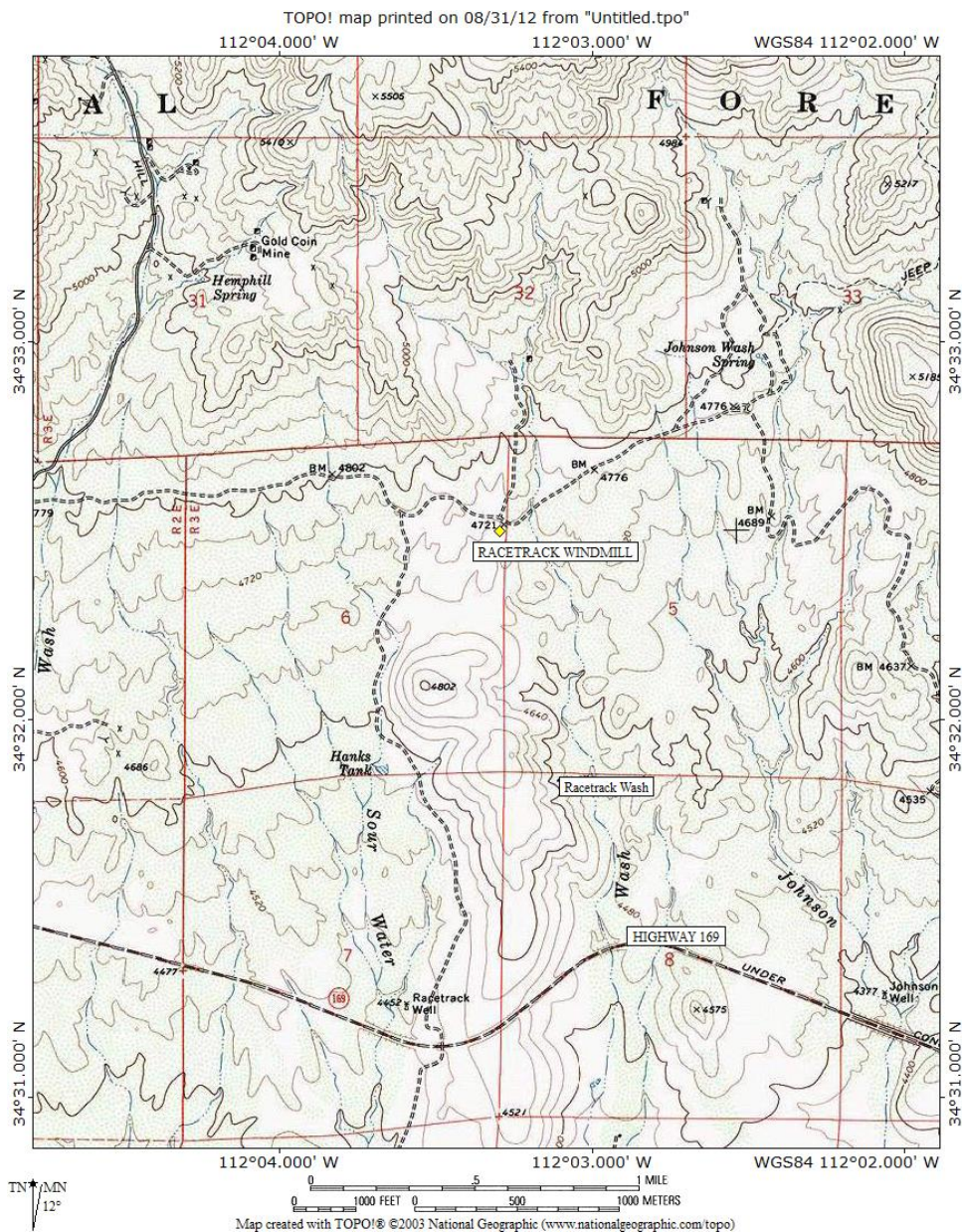
The Racetrack Windmill project proposes to drill a well adjacent to a former, historic, windmill site above Racetrack Wash. The former windmill was utilized in the 1950's; however, the Forest Service cannot find records of when or why it was removed. The Flower Pot Ranch that has the livestock grazing rights in this area has built, and maintains, about four other windmills on the Cienega Allotment. Based on similar sites, the well-driller thinks they will need to drill to a depth of about 200 feet to reach an adequate water source. Above the well site, the ranch will erect a windmill. They have built several other windmills on the allotment, all of which function well and are regularly maintained. There are already two large cement troughs at the site from the former windmill. These were well-constructed, but because of their age, would need to be lined to ensure that water would not leak out (see photos).





## PROJECT LOCATION:

The site of the proposed Racetrack Windmill is on the Verde Ranger District of the Prescott National Forest in Game Management Unit 19A. It is located above Racetrack Wash on the Cienega Grazing Allotment. This area is just north of State Highway 169, approximately 3.5 miles west of Interstate 17 (see TOPO map).



GPS Location: N34° 32.523'; W112° 03.288'

Township 13N; Range 3E; Section 6 NENE

**LAND OWNERSHIP AT THE PROJECT SITE(S):**

(if the project area is private property, please state specifically and provide the landowner's name)

- US Forest Service, Verde Ranger District

*IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or  
LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?*  
YES[] NO[] N/A[X]

**HABITAT DESCRIPTION:**

The vegetation type is desert scrub, transitioning to the chaparral community up-slope. The Forest Service proposes to conduct prescribed burns in this vicinity to remove the old, decadent over-story and allow for early-successional stage re-growth. Elevation at the site is approximately 4721 feet.

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds

Well-drilling to 200 feet: \$5000

(estimate \$4K-5K from Balow's Windmill and Pump Co., Skull Valley, AZ)

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

Windmill and trough-lining materials: \$3000

Windmill assembly labor: \$2000

(estimates from Balow's Windmill and Pump Co., Skull Valley, AZ and recent construction of a similar windmill on this ranch)

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Flower Pot Ranch manager Gary Halford (928)301-8335

- Runs cattle for the Flower Pot Ranch on the Cienega Allotment
- Would contribute half the project costs for completing the Racetrack Windmill
- Would contract the construction of the windmill to a windmill/pump company
- Would maintain the windmill and insure year-round water availability for wildlife (per USFS allotment agreement)

US Forest Service is a potential partner in this project. The agency is interested in contributing funds to the windmill, but cannot commit at this time because their fiscal year begins on October 1<sup>st</sup> and there is some uncertainty about the up-coming budget.

**WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING, OR FACILITATING RECREATIONAL ACCESS?**

YES[] NO[X] N/A[]

**PROJECT MONITORING PLAN:**

The Flower Pot Ranch manager will inspect the windmill weekly while cattle are utilizing the Racetrack and Johnson Wash pastures, and periodically when livestock are absent from these pastures. The Arizona Game and Fish Department Wildlife Manager in GMU 19A will check the windmill at least monthly during the critical spring and summer months, and periodically through the remainder of the year, when conditions are wetter and cooler.

**PROJECT MAINTENANCE:**

The Racetrack Windmill will be maintained by the livestock permit-holder for the Cienega Allotment on the Prescott National Forest, as per the USFS grazing permit agreement. This permittee is currently the Flower Pot Ranch. They already inspect and maintain approximately four other windmills on the allotment, and have kept the windmills operational year-round.

**PROJECT COMPLETION REPORT TO BE FILED BY:**

Tom Bagley, Arizona Game and Fish Department

**WATER DEVELOPMENT PROJECTS** (*please use the worksheet below*):

N/A

**TREE CLEARING/REMOVAL PROJECTS** (*please use the worksheet below*):

N/A